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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,219

04/12/2007

Tobias Melz

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EXAMINER

HERNANDEZ, MICHAEL

ART UNIT

PAPER NUMBER

3612

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,219	<b>Applicant(s)</b> MELZ ET AL.	
	<b>Examiner</b> MIKE HERNANDEZ	<b>Art Unit</b> 3612	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/8/06</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings***

1. **The drawings are objected to** under 37 CFR 1.83(a) because they fail to show how the parts T1 and T2 interlock as described in the specification and the claims. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1-20 are rejected** under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the drawings and specification do not provide evidence of how the parts T1 and T2 are interlockable and unlockable.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-20 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 7, 8, and 10 recite the limitation "the first and/or second part". The term 'and/or' implies alternative structure and therefore is indefinite.

Claim 8 recites the limitation "the intelligent structure". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1-5 and 7-16 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 6,312,045 to Kitigawa.

As to claim 1, Kitigawa discloses (Fig 31-37) a device for a motor vehicle that affords occupant protection during impact of energy directed laterally against a motor vehicle door as a result of a collision, the device having a connecting structure comprising at least two parts, a first part (hole in bottom of door) and a second part (pin in door sill) of which the first part is connected to the motor vehicle door and the second part is connected to an energy-absorbing area of the motor vehicle body located in the interior of the motor vehicle and the parts can be brought to enter an active connection via at least one common joining section for selective diversion of at least a part of the impact energy acting laterally on the motor vehicle door into an area of the body of the motor vehicle, and wherein the second part undergoes, due to energy input to a transformable material (electronic actuator 25), a change in mechanical state in a form of a change in shape due to which the parts are made to adjoin and interlock.

As to claim 2, Kitigawa discloses the first and second parts have conform-designed joining contours in the joining section.

As to claim 3, Kitigawa discloses the first part partially encloses the second part.

As to claims 4, 12, and 13, Kitigawa discloses the parts are made to adjoin in the joining section by closing the door.

As to claims 5, 14, 15, and 16, Kitigawa discloses the parts are interlockable and unlockable.

As to claim 7, Kitigawa discloses the second part undergoes a change in shape directly before and during the impact of energy directed to the vehicle door as a result of a collision so that the two parts enter a dissoluble active connection.

As to claim 8, Kitigawa discloses an approach sensory mechanism to detect an unavoidable collision and generates a signal to activate the transformable material.

As to claim 9, Kitigawa discloses the door is a side door and the second part is attached to the floor region.

As to claim 10, it is understood that a change in shape of the transformable material of Kitigawa would inherently affect its vibration and/or dampening behavior.

Applicant may seasonally challenge, for the official record in this application, this and any other statement of judicial notice in timely manner in response to this office action. Please specify the exact statement to be challenged. Applicant is reminded, with respect to the specific challenge put forth, of the duty of disclosure under Rule 56 to disclose material which is pertinent to patentability including claim rejections challenged by applicant.

As to claim 11, Kitigawa discloses the energy input is independent of the crash energy.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The attached references disclose similar interlocking structures. US Pat No 6,193,303 to Urushiyama et al. discloses transformable elements that

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receive an energy input from a crash sensor to affect a change in an energy absorbing element.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MIKE HERNANDEZ whose telephone number is (571)272-2354. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis H. Pedder/  
Primary Examiner, Art Unit 3612

/MIKE HERNANDEZ/  
Examiner, Art Unit 3612